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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/619,917

07/15/2003

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60021-378501

7149

29838 7590 05/08/2007  
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EXAMINER

STACE, BRENT S

ART UNIT

PAPER NUMBER

2161

MAIL DATE

DELIVERY MODE

05/08/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/619,917

Applicant(s)

ALLEN ET AL.

Examiner

Brent S. Stace

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Remarks***

1. This communication is responsive to the amendment filed February 27<sup>th</sup>, 2007. Claims 1-33 are pending. In the amendment filed February 27<sup>th</sup>, 2007, Claims 1, 2, 8, 12, 13, 19, 23, 24, and 30 are amended and Claims 1, 8, 12, 19, 23, and 30 are independent Claims. The examiner acknowledges that no new matter was introduced and the claims are supported by the specification.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 2<sup>nd</sup>, 2007 has been entered.

### ***Response to Arguments***

3. Applicant's arguments filed February 27<sup>th</sup>, 2007 with respect to Claims 1-33 have been fully considered but they are not persuasive.
4. With respect to the applicant's argument with respect to exemplary Claim 1 (including Claims 8, 12, 19, 23, and 30) that the prior art(s) allegedly do not teach "a routing system," the examiner respectfully disagrees. McFarlane, col. 5, lines 49-51 with McFarlane, col. 10, lines 29-47 (which is a summary/example of McFarlane, col. 7,

lines 19-67 was used to map the "routing system" of the claims. In the cited sections, McFarlane teaches that calls are routed to a best fit agent based upon rules, skills, and other conditions of the agent/calling system. Since calls are routed (and based on rules), this alone makes routing logic.

5. With respect to the applicant's argument with respect to exemplary Claim 1 (including Claims 8, 12, 19, 23, and 30) that the prior art(s) allegedly do not teach "a central skill database," the examiner respectfully disagrees. The applicant's remarks are correct in stating that Fig. 6 and database 107, teach the claimed central skill database. Specifically, Fig. 6 is more representative of the claimed central skill database. A dictionary definition of "database" is provided with this office action to show the broadest reasonable interpretation used by the examiner.

6. With respect to the applicant's argument with respect to exemplary Claim 1 (including Claims 8, 12, 19, 23, and 30) that the prior art(s) allegedly do not teach "a skill impacting system...storing skill data for each of the plurality of agents in the central skill database, wherein storing skill data comprises modifying at least one of the profiles," the examiner respectfully disagrees. McFarlane, col. 11, lines 24-39 with McFarlane, col. 12, lines 17-20 with McFarlane, col. 4, lines 13-23 with McFarlane, Fig. 6 was used in rejecting these new limitations. In the cited sections, McFarlane teaches that skills of the agents change based on tools available and fulfillment of requirements to a next skill level. This is a system that impacts the skills of the agents. McFarlane even discusses in the cited sections different ways of impacting the skills. As shown in Fig. 6, McFarlane also teaches storing skill data relating to agents. When the skills

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change, the table changes accordingly. The data in the table compose the agent's profile.

7. With respect to the applicant's argument with respect to exemplary Claim 2 (including Claims 13 and 24) that the prior art(s) allegedly do not teach "wherein the routing logic includes routing rules and routing source data for performing the step of routing, the routing source data including agent availability and the skill based information in the routing system," the examiner respectfully disagrees. First, as discussed above, since calls are routed in McFarlane (and based on rules), this alone makes routing logic. Lastly, in the cited sections, McFarlane teaches different rules and data used in determining (using rules) what agent to connect the caller to. Since McFarlane in col. 4, specifically lines 53-56 teaches mapping a selected agent of the pool of agents to a caller's needs is based on skill level, and at least agent availability, this is routing calls based on source data as required by the claim.

8. The other claims argued merely because of a dependency on a previously argued claim(s) or because they are substantially the same as a previously argued claim(s) in the arguments presented to the examiner, filed February 27<sup>th</sup>, 2007, are moot in view of the examiner's interpretation of the claims and art and are still considered rejected based on their respective rejections from a prior Office action (parts of recited again below).

***Response to Amendment***

***Specification***

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9. In light of the applicant's respective arguments or respective amendments, the previous specification objections to the abstract have been withdrawn.

### ***Drawings***

10. In light of the applicant's respective arguments or respective amendments, the previous drawing objections to the drawings have been withdrawn. However the examiner discovered another objection.

11. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "730" has been used to designate both "identification module" and "agent selector" in Fig. 7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. The examiner reminds the applicant that specification correction(s) may be required to correspond to any amended drawings.

### **INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

#### **Replacement Drawing Sheets**

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Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

### **Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

### **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,453,038 (McFarlane et al.) in view of U.S. Patent No. 6,901,380 (Bremers).

For **Claim 1**, McFarlane teaches: "A method of maintaining skills for agents of a contact center, [McFarlane, col. 4, lines 11-28] the method comprising:

- providing profiles in a central skill database for a plurality of agents [McFarlane, col. 4, lines 7-28 with McFarlane, Fig. 6]
- providing a skill-impacting system, the skill impacting system storing data for each of the plurality of agents in the central skill database, wherein storing skill data comprises modifying at least one of the profiles; [McFarlane, col. 11, lines



24-39 with McFarlane, col. 12, lines 17-20 with McFarlane, col. 4, lines 13-23 with McFarlane, Fig. 6]

- receiving from the skill-impacting system skill data for a first agent; [McFarlane, col. 11, lines 23-55 with McFarlane, col. 12, lines 8-17]
- updating a first profile in the central skill database for the first agent based on the skill data received [McFarlane, col. 11, lines 23-55 with McFarlane, col. 12, lines 17-20]
- ...such that the routing logic determines which of the plurality of agents are to handle a contact based on at least skill data" [McFarlane, col. 4, lines 40-59].  
McFarlane discloses the above limitations but does not expressly teach:
- "...selectively synchronizing routing logic of a routing system with skill-based information from the first profile in the central skill database ..., wherein the synchronizing is independent of the updating."

With respect to Claim 1, an analogous art, Bremers, teaches:

- "...selectively synchronizing routing logic of a routing system with skill-based information from the first profile in the central skill database ..., wherein the synchronizing is independent of the updating" [Bremers, col. 6, lines 32-42 with Bremers, col. 8, lines 27-39 with Bremers, col. 9, lines 35-42 with Bremers, cols. 15-16, lines 63-8 with McFarlane, col. 5, lines 49-51 with McFarlane, col. 10, lines 29-47 (which is a summary/example of McFarlane, col, 7, lines 19-67)].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Bremers with McFarlane because both inventions are directed towards utilizing databases on computers.

Bremers's invention would have been expected to successfully work well with McFarlane's invention because both inventions use databases. McFarlane discloses a system for integrating agent database access skills in call center agent assignment applications comprising an agent database and routing calls to the proper agents, however McFarlane does not expressly disclose selectively synchronizing routing logic of the routing system with skill-based information from the first profile in the central skill database such that the routing logic determines which of the plurality of agents are to handle a contact based on at least skill data, wherein the synchronizing is independent of the updating. Bremers discloses a merchandising system method and program product utilizing an intermittent network connection comprising synchronizing modifications of databases where the synchronization can be on a scheduled basis.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the synchronization methods and a second database to synchronize with from Bremers and install them into the invention of McFarlane, thereby offering the obvious advantage of reducing the bandwidth on the database of agent skills so as to reduce cost.

**Claim 2** can be mapped to McFarlane (as modified by Bremers) as follows: "The method from claim 1, further comprising:

- receiving a contact from a customer; [McFarlane, col. 4, lines 28-33]

- processing routing logic in the routing system to select a second agent from the plurality of agents; [McFarlane, col. 4, lines 39-60] and
- routing the contact to the second agent; [McFarlane, col. 4, lines 39-60]
- wherein the routing logic includes routing rules and routing source data for performing the step of routing, [McFarlane, col. 5, lines 49-54 with McFarlane, cols. 7-8, lines 20-11] the routing source data including agent availability and the skill-based information in the routing system" [McFarlane, col. 4, lines 39-60].

**Claim 3** can be mapped to McFarlane (as modified by Bremers) as follows: "The method from claim 1, wherein synchronizing the routing system is accomplished for a plurality of profiles in the central skill database" [Bremers, col. 8, lines 32-43].

**Claim 4** can be mapped to McFarlane (as modified by Bremers) as follows: "The method from claim 1, wherein updating the first profile is triggered when skill data is received from the skill-impacting system" [McFarlane, col. 11, lines 26-55 with McFarlane, col. 12, lines 17-20].

**Claim 5** can be mapped to McFarlane (as modified by Bremers) as follows: "The method from claim 1, wherein synchronizing the routing system is automatically run when triggered by an event" [McFarlane, col. 4, lines 28-60].

**Claim 6** can be mapped to McFarlane (as modified by Bremers) as follows: "The method from claim 1, wherein synchronizing the routing system is automatically run at a predetermined time interval" [Bremers, cols. 15-16, lines 63-8].

**Claim 7** can be mapped to McFarlane (as modified by Bremers) as follows: "The method from claim 1, wherein the skill data is received from a plurality of skill-impacting systems" [McFarlane, col. 11, lines 23-55 with McFarlane, col. 12, lines 17-20].

For **Claim 8**, McFarlane teaches:

- ...maintaining a plurality of profiles in a central skill database corresponding to a plurality of contact center agents, [McFarlane, col. 4, lines 7-28 with McFarlane, Fig. 6] wherein the plurality of profiles comprise skill-based ratings for a plurality of skills; [McFarlane, col. 11, lines 22-26 with McFarlane, Fig. 6]
- storing skill data for each of the plurality of agents in the central skill database of at least one skill-impacting system, wherein the step of storing skill data comprises modifying at least one of the plurality of profiles; [McFarlane, col. 11, lines 24-39 with McFarlane, col. 12, lines 17-20 with McFarlane, col. 4, lines 13-23 with McFarlane, Fig. 6]
- using the skill data from the at least one skill-impacting system to update the plurality of profiles in the central skill database; [McFarlane, col. 11, lines 23-55 with McFarlane, col. 12, lines 17-20]
- ...wherein the source data is based on agent skills and configures routing logic to make routing decisions" [McFarlane, col. 4, lines 39-60].

McFarlane discloses the above limitations but does not expressly teach: "A method for synchronizing skill data in a contact center, comprising:

- ...maintaining source data in a routing system for the contact center

- ...selectively updating the source data based on agent skills with skill-based ratings in the central skill database for reconfiguring the routing logic, wherein the updating the source data is independent of updating the plurality of profiles.”

With respect to Claim 8, an analogous art, Bremers, teaches: “A method for synchronizing skill data in a contact center [Bremers, col. 6, lines 32-42 with Bremers, cols. 15-16, lines 63-8] comprising:

- ...maintaining source data in a routing system for the contact center [Bremers, col. 6, lines 19-42 with McFarlane, col. 4, lines 39-60]
- ...selectively updating the source data based on agent skills with skill-based ratings in the central skill database for reconfiguring the routing logic, wherein the updating the source data is independent of updating the plurality of profiles”

[Bremers, col. 6, lines 32-42 with Bremers, cols. 15-16, lines 63-8].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Bremers with McFarlane because both inventions are directed towards utilizing databases on computers.

Bremers’s invention would have been expected to successfully work well with McFarlane’s invention because both inventions use databases. McFarlane discloses a system for integrating agent database access skills in call center agent assignment applications comprising an agent database and routing calls to the proper agents, however McFarlane does not expressly disclose synchronizing the routing system with skill based information from the first profile in the central skill database. Bremers

discloses a merchandising system method and program product utilizing an intermittent network connection comprising synchronizing databases.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the synchronization methods and a second database to synchronize with from Bremers and install them into the invention of McFarlane, thereby offering the obvious advantage of reducing the bandwidth on the database of agent skills so as to reduce cost.

**Claim 9** can be mapped to McFarlane (as modified by Bremers) as follows: "The method from claim 8, further comprising:

- identifying at least one contact characteristic for a customer; [McFarlane, col. 4, lines 28-35] and
- selecting an agent from the plurality of agents for the customer; [McFarlane, col. 4, lines 39-60]
- wherein selecting comprises processing the routing logic to consider the skill-based ratings of the plurality of agents in view of the at least one contact characteristic" [McFarlane, col. 4, lines 39-60].

**Claim 10** can be mapped to McFarlane (as modified by Bremers) as follows: "The method from claim 9, wherein selecting further comprises choosing an agent who is a best-fit" [McFarlane, col. 4, lines 51-60 with McFarlane, col. 5, lines 61-65 with McFarlane, col. 8, lines 7-11].

**Claim 11** can be mapped to McFarlane (as modified by Bremers) as follows: "The method from claim 8 wherein maintaining the plurality of profiles is triggered by the

occurrence of a skill-changing event indicated by the at least one skill-impacting system" [McFarlane, col. 11, lines 26-55 with McFarlane, col. 12, lines 17-20].

**Claims 12-18** encompass substantially the same scope of the invention as that of Claims 1-7, respectfully, in addition to a system and some modules for performing the method steps of Claims 1-7, respectfully. Therefore, Claims 12-18 are rejected for the same reasons as stated above with respect to Claims 1-7, respectfully.

**Claims 19-22** encompass substantially the same scope of the invention as that of Claims 8-11, respectfully, in addition to a system and some modules for performing the method steps of Claims 8-11, respectfully. Therefore, Claims 19-22 are rejected for the same reasons as stated above with respect to Claims 8-11, respectfully.

**Claims 23-29** encompass substantially the same scope of the invention as that of Claims 1-7, respectfully, in addition to a computer program on a computer readable medium and some code for performing the method steps of Claims 1-7, respectfully. Therefore, Claims 23-29 are rejected for the same reasons as stated above with respect to Claims 1-7, respectfully.

**Claims 30-33** encompass substantially the same scope of the invention as that of Claims 8-11, respectfully, in addition to a computer program on a computer readable medium and some code for performing the method steps of Claims 8-11, respectfully. Therefore, Claims 30-33 are rejected for the same reasons as stated above with respect to Claims 8-11, respectfully.

**Conclusion**

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent S. Stace whose telephone number is 571-272-8372 and fax number is 571-273-8372. The examiner can normally be reached on M-F 9am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu M. Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brent Stace *B.S.*

*Apu Mofiz*  
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SUPERVISORY PATENT EXAMINER

*con.*